Metabolomic analysis shows differential hepatic effects of T_2 and T_3 in rats after short-term feeding with high fat diet

Liliana F. Iannucci^{1,3}, Federica Cioffi², Rosalba Senese³, Fernando Goglia², Antonia Lanni^{3,*}, Paul M. Yen^{1,*}, Rohit A. Sinha^{1,*}

Supplementary figure legends

Supplementary Figure 1. Animals body weight, blood glucose T_3 and T_4 levels. The table shows the animals body weight, circulating levels of T_3 and T_4 and glucose (fasting) after 1 week of diet regime. Values are means $\pm SEM$ (n=4). *P <0.05 in NCD Vs HFD; *P <0.05 in HFD Vs HFD+ T_2 /HFD+ T_3 .

Supplementary Figure 2. Hepatic aminoacids and organic acids metabolism are regulated by T_2 and T_3 in HFD fed rats. Aminoacids concentration measured in hepatic rat tissues. Values are means \pm SEM (n=4). *P <0.05 in NCD Vs HFD; *P <0.05 in HFD Vs HFD+ T_2 /HFD+ T_3 .

Supplementary Figure 3. Differential THs effects on mitochondrial biogenesis. Representative Immunoblot and densitometry showing proteins content of mitochondrial biogenesis (**A-B**) and mitochondrial dynamics markers (**C-D**). Values are means \pm SEM (n=4). *P <0.05 in NCD Vs HFD; *P <0.05 in HFD Vs HFD+T₂/HFD+T₃.

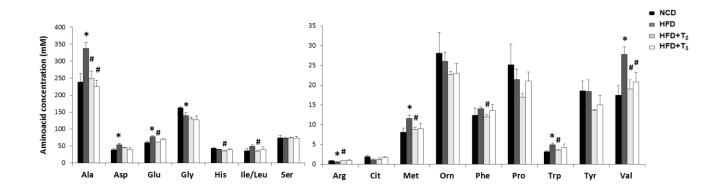
Supplementary Figure 4. HFD-induced SOD1 expression is prevented by T_3 but not T_2 in rat livers. Representative Immunoblot and densitometry showing proteins content of the antioxidant enzyme SOD1. Values are means \pm SEM (n=4). *P <0.05 in NCD Vs HFD; #P <0.05 in HFD Vs HFD+ T_2 /HFD+ T_3 .

Supplementary Figure 5. HFD-reduced TRβ1 levels in rat livers. Representative Immunoblot and densitometry showing proteins content of TRβ1. Values are means \pm SEM (n=4). *P <0.05 in NCD Vs HFD; *P <0.05 in HFD Vs HFD+T₂/HFD+T₃.

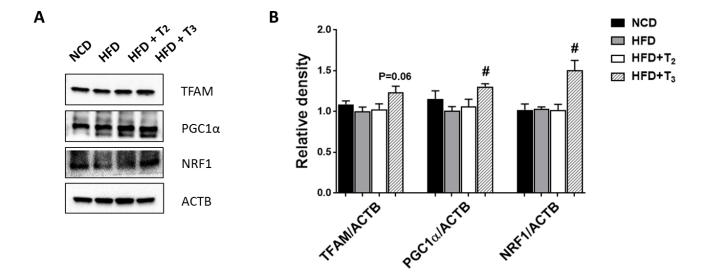
	Body weight (g)	TT4 (nM)	TT3 (nM)	Glucose (mg/dl)
NCD	320 ± 10	62 ± 3,8	0,79 ± 0,04	82 ± 2,2
HFD	340 ± 11	71 ± 4,9	0,82 ± 0,05	94,1 ± 3,8
HFD-T ₂	325 ± 9	67 ± 3,2	0,76 ± 0,03	87 ± 3,2
HFD-T ₃	322 ± 8	58 ± 2,1	1,45 ± 0,12*	88 ± 3,4

^{*}P < 0.05 vs. NCD, HFD, HFD-T₂.

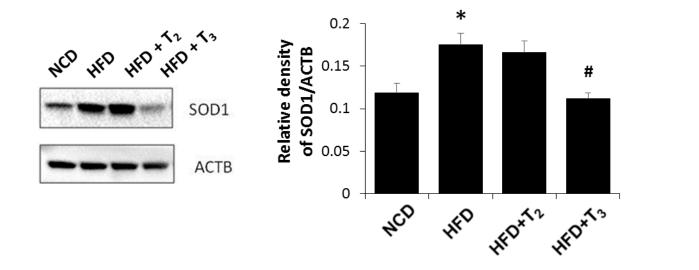
Suppl Figure 1



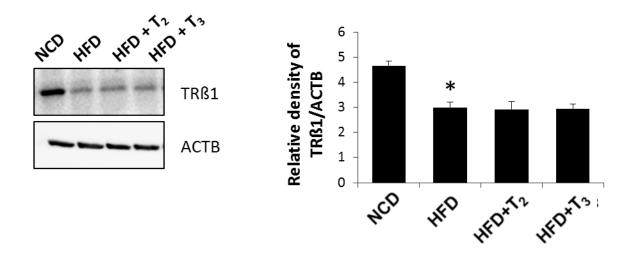
Suppl Figure 2



Suppl Figure 3



Suppl Figure 4



Suppl Figure 5